

CLAIMS

[1] A pneumatic tire having a plural of circumferential grooves extending along the equatorial plane of the tire on a tread portion and an asymmetric tread pattern formed on both of tread half regions virtually defined by dividing the tread portion at the equatorial plane of the tire, wherein, in a state where the tire is fitted on a specified rim and inflated the tire/rim assembly is mounted on the vehicle with the defined air pressure and mass corresponding to the maximum load capacity being applied to it, an effective ground contact area S_{out} of a tread half region located outside of the vehicle is larger than a effective ground contact area S_{in} of a tread half region located inside of the vehicle and a distance H_{out} measured along the radial direction of the tire from a tread end located outside of the vehicle to a point at which the outer surface of the tread portion intersects with the equatorial plane of the tire is smaller than a distance H_{in} measured along the radial direction of the tire from a tread end located inside of the vehicle to the point at which the outer surface of the tread portion intersects with the equatorial plane of the tire.

[2] The tire according to claim 1, wherein the effective ground contact area S_{out} and S_{in} and the radial distance H_{out} and H_{in} satisfy the following expression (1):

$$S_{out}/S_{in} = A * H_{out}/H_{in} \quad (1.1 < A < 2.1) \quad (1)$$

[3] The tire according to claim 1 or 2, wherein in the cross section in the width direction of the tire, the curvature radius of the tread half region located outside of the vehicle is within the range from 110 to 500% of the curvature radius of the tread half region located inside of the vehicle.

[4] The tire according to any one of claims 1 to 3, wherein the H_{out} is within the range from 2 to 20 mm.

[5] The tire according to any one of claims 1 to 3, wherein the H_{in} is within the range from 3 to 30 mm.

[6] The tire according to any one of claims 1 to 5, wherein the H_{out} is within the range from 1.5 to 15% of the grounding width of the tread portion contacting the ground, and the H_{in} is within the range from 2 to 20% of the width of the tread portion contacting the ground.

[7] The tire according to any one of claims 1 to 6, wherein the tread portion further comprises a plural of oblique grooves obliquely extending with respect to

the equatorial plane of the tire.